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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,373	11/25/2003	William P. Addiego	SP03-164	8018
22928	7590	07/26/2006	EXAMINER	
CORNING INCORPORATED			LOPEZ, CARLOS N	
SP-TI-3-1				
CORNING, NY 14831			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/723,373

Applicant(s)

ADDIEGO ET AL.

Examiner

Carlos Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brundage et al (US 6,365,259) in view of Kawazu et al (US 2005/0169834A1).

Brundage discloses a method of making a ceramic honeycomb. The method comprises providing the claimed batch components as noted in Col. 3, lines 49-56, mixing to provide a plasticized mass as noted in Col. 3, lines 57-59, extruding, drying and firing as noted in bridging paragraph of Col. 3-4. Brundage is silent disclosing heat-treating the plasticized mass to obtain hydroxylation of the transition alumina. Kawazu teaches that alumina may be rehydrated prior to extrusion by mixing it with water for a specified time as shown in paragraph 32 and 37 of Kawazu's and a specified temperature as noted in claim 1 of Kawazu to convert the alumina into an alpha alumina. As noted in the abstract and in paragraph 2 of Kawazu, the hydration of the alumina would provide a high strength alpha alumina with a controlled pore volume. Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have heat treated the batch components of Brundage prior to extrusion as taught by Kawazu, hence envisioning treating the alumina prior to plasticizing or after plasticizing the batch components, in order to provide a high strength alpha alumina with a controlled pore volume body. Furthermore, while Kawazu heat-treats the formed body

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after extrusion it would be obvious to a person of ordinary skill in the art to treat the material prior to extrusion. Treating the material prior to extrusion as opposed to after extrusion still provides the sought out enhanced formed body as noted in paragraph 36 of Kawazu without any unexpected results since it would still provide  $\alpha$ -alumina in the formed body as noted in paragraph 36.

As for claim 17, see paragraph 28 of Kawazu disclosing rho and chi alumina.

As for claim 18, see bridging paragraph of Col. 4-5 of Brundage.

As for claim 19-20, see Col. 5, lines 20-36 of Brundage.

Claims 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brundage et al (US 6,365,259) in view of Kawazu et al (US 2005/0169834A1) as applied to claim 16, above, and in further view of Addiego et al (US 6,677,261). The combined teachings of Brundage and Kawazu are silent using other types of alumina for forming honeycomb bodies. However, Addiego, as noted in its claim 7, discloses other sources of alumina that can be used in forming the honeycomb body. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have used other types of alumina, aside from those taught by Brundage and kawazu, as taught by Addiego, in order to form a ceramic honeycomb.

As for claim 21, Addiego in Col.5, lines 50-55, teaches of hydrating the alumina in the claimed temperature and time ranges at the extend of hydration of the alumina is a time-tempearture dependent. Hence, the claimed time and temperature are

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indicative of the desired alumina hydration and a routine experimentation may be conducted to determine the optimum time and temperature range that would provide a high strength alumina honeycomb body as sought by Brundage and Kawazu.

***Response to Arguments***

Applicant's arguments with respect to claims 16-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, consisting of a large, stylized 'L' followed by a horizontal line that extends to the right.

CL